SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE

MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

IN THE CLAIMS

Please amend the claims as follows.

- (Currently Amended) A method for managing a plurality of sources comprising: 1. selecting [[an]] a type of empirical measurement of [[a]] performance from a plurality of types of empirical measurement of each of the plurality of sources, wherein the type of empirical measurement is selected according to a size of data to be obtained from at least one of [[the]] a plurality of sources;
 - selecting a download source in reference to from the plurality of sources, the selection made according to empirical measurements of [[the]] performance having the selected type of for each of the plurality of sources; and
 - initiating a download of data from [[a]] the selected download source of the plurality of sources.
- 2. (Cancelled)
- 3. (Currently Amended) The method of claim 1, wherein the determining further comprises comprising:
 - obtaining an empirical measurement of a throughput speed performance of each of the plurality of sources from a local source.
- 4. (Original) The method of claim 1, wherein the performance further comprises a throughput speed.
- 5. (Original) The method of claim 1, wherein the performance comprises latency.

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(Currently Amended) The method of claim [[5]] 3, wherein the determining obtaining 6. the empirical measurement further comprises:

measuring the elapsed time of a transmission involving each of the plurality of sources.

7. (Currently Amended) The method of claim [[5]] 3, wherein the determining obtaining the empirical measurement further comprises for each of the plurality of sources:

recording transmission time from the current time and date;

initiating a transmission to a download source of the plurality of sources;

receiving a response to the transmission from the source;

recording the receipt time from the current date and time; and

determining the throughput speed of the source from the difference between the receipt time and the transmission time.

8. (Currently Amended) A tangible computer-accessible storage medium having stored thereon executable instructions for managing a plurality of sources, said executable instructions capable of directing a processor to perform:

selecting [[an]] a type of empirical measurement of performance from a plurality of types of empirical measurement a throughput speed of each of the plurality of sources, wherein the type of empirical measurement is selected according to a size of data to be obtained from at least one of [[the]] a plurality of sources;

selecting a download source in reference to the empirical measurements of the throughput speed of each of the plurality of sources; and

initiating a download of data from a download source of the plurality of sources.

9. (Currently Amended) The computer-accessible storage medium of claim 8, wherein the throughput speed further comprises a download speed.

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10. (Currently Amended) The computer-readable computer-accessible storage medium of claim 8, wherein said instruction for determining further comprises an instruction capable of directing the processor to perform:

measuring a throughput speed of each of the plurality of sources.

(Currently Amended) The computer-accessible storage medium of claim 10, wherein 11. said instruction for measuring further comprises instructions capable of directing the processor to perform for each of the plurality of sources:

recording transmission time from the current time and date: initiating a transmission to a download source of the plurality of sources; receiving a response to the transmission from the source; recording the receipt time from the current date and time; and determining the throughput speed of the source from the difference between the receipt time and the transmission time.

12.-18. (Cancelled)

- 19. (Currently Amended) The computer-accessible storage medium of claim 8, wherein the download source further comprises a source in a peer-to-peer network.
- 20. (Currently Amended) The computer-accessible storage medium of claim 8, wherein said instruction for determining further comprises instructions capable of directing the processor to perform:

recording transmission time from the current time and date; initiating a transmission to a download source of the plurality of sources; receiving a response to the transmission from the source; recording the receipt time from the current date and time; and determining the round-trip timing of the download source from the difference between the receipt time of the response and the transmission time of the transmission.

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21. (Currently Amended) A computerized method for managing a plurality of sources comprising:

obtaining a list comprising a plurality of identification of sources;

- initiating a plurality of socket connections, the plurality of socket connections further comprising one socket connection for each of the plurality of sources, yielding a plurality of initiated socket connections;
- selecting [[an]] a type from a plurality of types of empirical measurement of performance of each of the plurality of sources, the type of empirical measurement selected according to a predetermined file size;
- receiving a response for the each of the plurality of initiated socket connections, yielding a plurality of responses;
- selecting a download source of the plurality of sources in reference to [[the]] an empirical measurement of performance having the selected type; and
- initiating a download of data from [[a]] the selected download source of the plurality of sources.
- 22. (Currently Amended) The computerized method of claim 21, wherein the predetermined file size is less than a predetermined threshold file size and wherein the type of empirical measurement of performance comprises a first response and wherein the selecting further comprises:

selecting the source associated with the response that is received first.

23. (Currently Amended) The computerized method of claim 21, wherein the predetermined file size is greater than a predetermined threshold file size and wherein the type of empirical measurement of performance comprises a latency and wherein the selecting further comprises: measuring the latency of each of the plurality of sources; and

selecting a source in reference to the download speed of each of the plurality of sources.

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24. (Previously Presented) The computerized method of claim 23, wherein measuring the latency further comprises:

storing a time and date of each of the plurality of initiating socket connections; storing the time and date of each of the plurality of responses; and determining the download speed of each of the plurality of sources from the differences in time between the time and date of each of the plurality of the responses and the time and date of each of the plurality of the initiating socket connections.

25. (Currently Amended) A system for managing sources in a peer-to-peer network comprising:

a processor;

software means operative on the processor for selecting [[an]] a type of empirical measurement of a plurality of types of measurements of [[a]] throughput speed of each of the plurality of sources, the type of empirical measurement selected according to a size of data to be obtained from at least one of the plurality of sources;

the software means including obtainer means to obtain [[the]] <u>an</u> empirical measurement <u>having the selected type, the empirical measurement comprising</u> of a throughput speed of each of the plurality of sources from at least one third-party source;

the software means selecting a <u>download</u> source in reference to the empirical measurements of the throughput speed <u>having the selected type for [[of]]</u> each of the plurality of sources and the at least one third-party source; and

a transmitter to initiate a download of data from [[a]] the download source of the plurality of sources.

26. (Original) The system of claim 25, wherein the throughput speed further comprises a round-trip time.

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27. (Original) The system of claim 25, wherein the throughput speed further comprises a latency.

- 28. (Currently Amended) A computerized system comprising:
 - a determiner of [[an]] empirical measurement measurements of a throughput speed of each of [[the]] a plurality of download peer-to-peer network sources, the empirical measurements having a type;
 - the determiner operable to select a type of empirical measurement and to select an empirical measurement of a throughput speed having the selected type for [[of]] each of the plurality of sources from at least one third-party source, the type of empirical measurement selected according to a size of data to be obtained from at least one of the plurality of download peer-to-peer network sources;
 - a selector of a <u>download</u> source in reference to the empirical measurement of the throughput speed of each of the plurality of peer-to-peer network sources and the at least one third-party source; and
 - a transmitter to initiate a download of data from [[a]] the download source of the plurality of peer-to-peer network sources.
- 29. (Previously Presented) The computerized system of claim 28, the determiner further comprising:
 - a transmitter to transmit a message to a download source of the plurality of sources;
 - a recorder of the time of a transmission of a message, operably coupled to the transmitter;
 - a receiver of a response to the transmission from the source, operably coupled to the transmitter;
 - a recorder of the time of receipt of a response; and
 - a determiner of the throughput speed of the source, from the difference between the receipt time and the transmission time.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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30. (Previously Presented) The computerized system of claim 28, wherein: the message further comprises a TCP/IP synchronized idle message; and the response further comprises a TCP/IP acknowledgment message.